



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of:

Dennis S. Fernandez

Application No. 10/626,877

Filed: 07/23/2003

For: TELEMATIC METHOD
AND APPARATUS WITH
INTEGRATED POWER
SOURCE

Examiner: Klebe, Gerald B.

Art Unit: 3618

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Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

APPEAL BRIEF

**IN SUPPORT OF APPELLANTS' APPEAL
TO THE BOARD OF PATENT APPEALS AND INTERFERENCES**

The Appellant hereby submit, in triplicate, the following Brief pursuant to 37 CFR 1.192 in support of the appeal from a final decision by the Examiner, dated November 28, 2005, and advisory action dated January 17, 2006, in the above-captioned case. The Appellant respectfully request consideration of this appeal by the Board of Patent Appeals and Interferences for allowance of the above-captioned patent application.

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C. Claim 12 is not anticipated by Cramer et al. under 35 U.S.C. 102(e), or in the alternative, claim 12 is not obvious over Cramer et al. under 35 U.S.C. 103(a).	
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I. Real party in interest

The real party in interest is Dennis Fernandez, an individual, having a residence at 1175 Osborn Avenue, Atherton, CA 94027.

II. Related appeals and interferences

To the best of Appellant's knowledge, there are no appeals or interferences related to the present appeal, which will directly affect, be directly affected by, or have a bearing on the Board's decision.

III. Status of claims

Claims 1-20 are currently pending, Claims 1, 12, and 13 being independent claims. Claim 21 is cancelled. These pending claims are being appealed, and are appended herewith in the **Claims appendix**.

IV. Status of amendments

Previously in Final Office Action mailed on November 28, 2005, Examiner rejected claims 1-2, 4-11, 13, and 15-20 as being anticipated by Cramer et al. under 35 U.S.C. 102(e); claims 3 and 14 as being unpatentable over Cramer et al. under 35 U.S.C. 103(a); and claim 12 is rejected under 35 U.S.C. 102(e) as anticipated by Cramer et al. or, in the alternative, under 35 U.S.C. 103(a) as being obvious over Cramer et al. reference. (US 2003/0230443 A1).

All claims 1-20 on appeal are provided in the **Claims appendix**, as filed in Amendment dated December 22, 2005.

V. Summary of claimed subject matter

Claims 1, 12, and 13 are independent claims pending in this appeal. The invention is an apparatus and method for vehicle power and telematic control, wherein an electronic controller is coupled to a fuel cell module and a telematic appliance, such that the electronic controller controls the fuel cell module electrical power adaptively to generate electrical power for the telematic appliance. In particular, software run by such controller adaptively controls the power by redistributing power reactively or proactively according to a determined load ratio, or power usage proportion.

VI. Grounds of rejection to be reviewed on appeal

- A. Claims 1-2, 4-11, 13, and 15-20 are rejected under 35 U.S.C. 102(e), as being anticipated by Cramer et al. (US 2003/0230443 A1).
- B. Claims 3 and 14 are rejected under 35 U.S.C. 103(a), as being unpatentable over Cramer et al. reference. (US 2003/0230443 A1).
- C. Claim 12 is rejected under 35 U.S.C. 102(e) as anticipated by Cramer et al. or, in the alternative, under 35 U.S.C. 103(a) as being obvious over Cramer et al. reference. (US 2003/0230443 A1).

VII. Argument

A. Claims 1-2, 4-11, 13, and 15-20 are not anticipated by Cramer et al. under 35 U.S.C. 102(e).

1. Claim 1

In the Advisory Action dated January 17, 2006, Examiner rejects Appellant's arguments and relies upon Cramer's disclosure in Figs D8 and D10, item 318, the associated text of paragraph 344 and Fig CR3, Fig D10, item 322 of the reference as anticipating Appellant's claim. Examiner further points to Cramer's disclosure in Fig D10, and the associated text of paragraphs 346, 309, 311, 312, 317, 318, 332, 333, and 308 as basis for rejecting Appellant's claim language in reference to the controller's capability of adaptively redistributing power retroactively or proactively according to a determined load ratio or power usage proportion.

Contrary to Examiner's contention, Cramer's Figs D8 and D10, item 318, the associated text of paragraph 344 and Fig CR3, Fig D10, item 322 of the reference, only disclose the vehicle's subsystems and configurations. These figures and associated texts do not teach nor suggest the dynamic adaptive capability of the central controller to distribute power as taught in Appellant's invention.

Similarly, Cramer's Fig D10 and the associated texts of paragraphs 346, 309, 311, 312, etc. do not disclose the capability of the central controller to manage power adaptively to redistribute power retroactively or proactively as is taught in Appellant's invention. Examiner contend that Fig D10 (item 320) adaptively manage power via a

Computer Area Network (item 324) which inherently comprise software that is responsive to various criteria needed to manage power in the vehicle as disclose in the associated texts of Cramer. However, Examiner's inherency argument in Cramer does not extend to Appellant's claim limitation. Respectfully, Appellant argues Cramer does not teach nor suggest the adaptive power redistribution according to a determined load ratio or power usage proportion.

2. Claim 13

Additionally, in the Final Office Action dated November 28, 2005, rejecting claims 1-2, 4-11, 13, and 15-20 under 35 U.S.C. 102(e) by Cramer et al., the Examiner refers to Fig CR3 and associated text at paragraph [0259] as anticipating Appellant's claim limitation. However, as argued in the record, Cramer's digital power manager that controls high-power switches to dynamically allocate battery or fuel-cell power only pertains to powertrain system, i.e., for powering and braking each wheel, but not for providing power to any telematic appliance, as required by Appellant's claim limitation.

The Examiner contend that because the power manager controller is digital, it is inherent that it has a software package for its operation (referring to paragraph [0309]). There is no evidence to support that Cramer's software being run by the controller, manage the power adaptively by redistributing such power reactively or proactively according to a determined load ratio, or power usage proportion. There are no prior systems that have the kind of adaptive capability present in Appellant's invention, and Cramer does not teach nor suggest this specific claim limitation. The fact that software is

involved, or that the controller operates digitally, is not sufficient to show that Cramer's software is designed to manage the voltage source adaptively by redistributing power reactively or proactively according to a determined load ratio, or power usage proportion to any telematic appliance, as required by Appellant's claim limitation.

Respectfully, Examiner is misguided by Cramer's disclosure because Appellant's claim limitation is not found in Cramer's figures or specification. Accordingly, for the foregoing reasons, Appellant respectfully submits that independent claims 1, from which claims 2, 4-11 depends, and claim 13, from which claims 15-20 depends, is not anticipated by Cramer et al., and thus such Examiner's rejections therefore are erroneous and should be overcome.

B. Claims 3 and 14 are not unpatentable over Cramer et al. under 35 U.S.C. 103(a).

As discussed above, Cramer et al. does not disclose all of the features of claim 1 from which claim 3 depends and does not disclose all of the features of claim 13 from which claim 14 depends.

Accordingly, for the foregoing reasons, Appellant respectfully submit that claims 3 and 14, is patentable over Cramer et al., and thus Examiner's rejections therefore are erroneous and should be overcome.

C. Claim 12 is not anticipated by Cramer et al. under 35 U.S.C. 102(e), or in the alternative, claim 12 is not obvious over Cramer et al. under 35 U.S.C. 103(a).

As discussed above, relative to claim 1, the reference of Cramer et al. does not disclose all of the features of claim 12. Specifically, Cramer et al. does not teach nor suggest that a vehicle power and telematic control method, wherein the controller includes software and couples electrical power from the fuel cell module adaptively to control the power by redistributing such power reactively or proactively according to a determined load ratio or a power usage proportion.

Examiner posits that Cramer et al. teaches the claimed method of claim 12 because the method is inherently disclosed. Appellant disagrees with the Examiner that the device in Cramer et al, in its normal and usual application would inherently require the claimed method for constructing and operating the system. Examiner overreaches by assuming all automotive systems must operate the same way. A person of ordinary skill in the art would not construe Cramer's system to operate by calculating load ratio or power usage proportion because load ratio calculations or power usage proportion may not be desirable in some situations. For example, load ratio calculation requires more time, which slows down processing cycle, and may deplete energy.

While it may not always be desirable, there are advantages in employing load ratio calculations or power usage proportion. For example, with new classes of devices, there is an increasing need to shift power voltages so that it switches on and off at

different times. Obviously, there is a need to have Appellant's type of adaptive algorithm to redistribute power retroactively or proactively to any telematic appliance. Therefore, Appellant respectfully submit that the Examiner's unsupported assumption that the device in Cramer et al., in its normal and usual operation would necessarily require the claimed method for constructing and operating the system is clearly misguided.

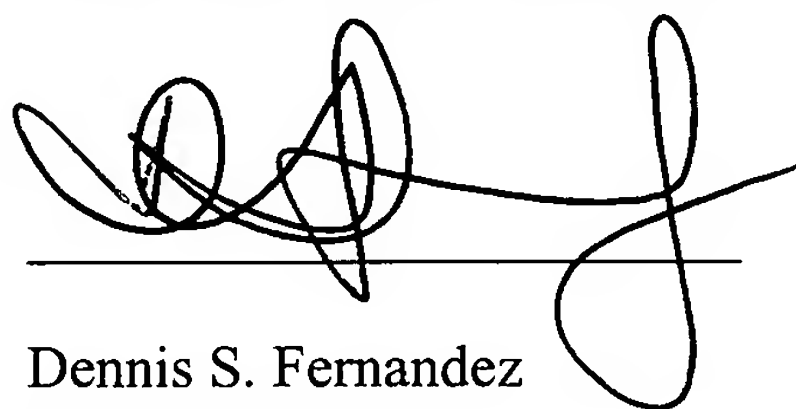
Alternatively, the examiner argues that claim 12 is obvious over Cramer et al. under 35 U.S.C. 103(a). The fact that Cramer discloses the structure necessary to perform the claim functions does not imply that one of ordinary skill in the art would find the claimed method to be an obvious step in light of the disclosed structures of the reference. Again, Examiner is overreaching in making this assumption. As discussed above, because load ratio calculations and power usage proportions may not be desirable under certain conditions, it would not be reasonable to assume that Appellant's claimed invention is obvious over Cramer et al. Cramer et al. neither suggest nor teach all limitations to Appellant's claimed invention.

CONCLUSION

Hence in this Appeal Brief, Appellants respectfully conclude that the Examiner was in error to reject claims 1-2, 4-11, 13, and 15-20 under 35 U.S.C. 102(e); claims 3 and 14 under 35 U.S.C. 103(a); and claim 12 under 35 U.S.C. 102(e), or in the alternative under 35 U.S.C. 103(a) per Cramer et al.

Respectfully Submitted,

FERNANDEZ & ASSOCIATES, LLP

A handwritten signature in black ink, appearing to read 'Dennis S. Fernandez', written over a horizontal line.

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Date: 3/31/06

VIII. Claims appendix

Claims Presented For Appeal (as filed via Rule-116 Amendment dated 12/22/2005)

1. (PREVIOUSLY PRESENTED) Vehicle power and telematic control system comprising:

an electronic controller;

a fuel cell module; and

a telematic appliance,

wherein the electronic controller couples electrical power from the fuel cell module adaptively to the telematic appliance, a software being run by the controller to manage the power adaptively by redistributing such power reactively or proactively according to a determined load ratio, or power usage proportion.

2. (ORIGINAL) The control system of claim1 wherein:

the electronic controller stores the electrical power from the fuel cell module by recharging a lithium-ion battery.

3. (ORIGINAL) The control system of claim 1 wherein:

the electronic controller configures the fuel cell module to generate a 42-volt or 14-volt electrical power.

4. (ORIGINAL) The control system of claim 1 wherein:

the electronic controller couples to the fuel cell module or the telematic appliance through a shared connection through which a control signal and a power signal is provided.

5. (ORIGINAL) The control system of claim 1 wherein:

the electronic controller couples electrical power from a generator to the telematic appliance.

6. (ORIGINAL) The control system of claim 1 wherein:

the electronic controller controls the electrical power in response to a sensor signal provided by the telematic appliance.

7. (ORIGINAL) The control system of claim 6 wherein:

the sensor signal represents a fault or error condition in the telematic appliance.

8. (ORIGINAL) The control system of claim 6 wherein:

the sensor signal represents a media format or load in the telematic appliance.

9. (ORIGINAL) The control system of claim 6 wherein:

the sensor signal represents a location or jurisdiction of the telematic appliance.

10. (ORIGINAL) The control system of claim 1 wherein:

the electronic controller controls the electrical power in response to a measured quality of an electrical power signal.

11. (ORIGINAL) The control system of claim 1 wherein:

the electronic controller controls the electrical power according to a predicted function or scheduled service in the telematic appliance.

12. (PREVIOUSLY PRESENTED) Vehicle power and telematic control method comprising steps of:

coupling an electronic controller to a fuel cell module and a telematic appliance; and

controlling adaptively by the electronic controller the fuel cell module electrical power to generate electrical power for the telematic appliance, a software being run by the controller to control the power adaptively by redistributing such power reactively or proactively according to a determined load ratio, or power usage proportion.

13. (PREVIOUSLY PRESENTED) Automotive electrical apparatus comprising:

a multi-level voltage source; and

a telematic system, coupled to the multi-level voltage unit for accessing a first and second voltage source, a software being run to manage the voltage source adaptively by redistributing power of such voltage source reactively or proactively according to a determined load ratio, or power usage proportion.

14. (PREVIOUSLY PRESENTED) The apparatus of claim 13 wherein:

the first voltage source comprises a 36-42 volt-source or bus, and the second voltage source comprises a 12-14 volt-source or bus.

15. (PREVIOUSLY PRESENTED) The apparatus of claim 13 wherein:

a DC-DC converter couples the first voltage source to the second voltage source.

16. (PREVIOUSLY PRESENTED) The apparatus of claim 13 wherein:

the telematic system is coupled adaptively to the voltage unit, thereby enabling such voltage unit to provide multi-level voltages to one or more telematic appliances from the group

consisting of a wireless or satellite network or communications device, a digital video or audio media or entertainment device, a global positioning or navigational locator or guidance device, and an image camera, radar or biometric sensor device.

17. (PREVIOUSLY PRESENTED) The apparatus of claim 13 wherein:

the first or second voltage source comprises a fuel cell stack, whereby such stack enables multi-level voltages to be generated by one or more fuel cells from the group consisting of a proton exchange membrane fuel cell, a tubular solid oxide fuel cell, an alkaline fuel cell, a phosphoric acid fuel cell, and a molten carbonate fuel cell.

18. (PREVIOUSLY PRESENTED) The apparatus of claim 13 further comprising:

a body or power train controller, coupled to the multi-level voltage unit for accessing the first and second voltage source.

19. (PREVIOUSLY PRESENTED) The apparatus of claim 13 wherein:

the multi-level voltage unit is coupled to a vehicle multimedia bus or a human-machine interface.

20. (PREVIOUSLY PRESENTED) The apparatus of claim 13 wherein:

the telematic system comprises an optical, magnetic or biometric sensor.

21. (CANCELED)

IX. Evidence appendix

X. Related proceedings appendix



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Petitioner's Docket No.: FERN-P014
PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Fernandez, Dennis
Application No.: 10/626, 877
Filed: 07/23/2003

Art Unit: 3618
Examiner: Klebe, Gerald B.

For: Telematic Method and Apparatus with Integrated Power Source

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ATTN: MAIL STOP APPEAL BRIEF-PATENTS

**TRANSMITTAL OF APPEAL BRIEF
(PATENT APPLICATION – 37 CFR 1.992)**

1. Transmitted herewith, in triplicate, is the APPEAL BRIEF in this application, with respect to the Notice of Appeal filed on March 20, 2006.
2. STATUS OF APPLICANT

This is on behalf of

- ☐ Other than a small entity
☒ Small entity

A statement:

- ☐ is attached
☒ was already filed.

3. FEE FOR FILING APPEAL BRIEF

Pursuant to Patent Appeals, the fee for filing the Appeal Brief is:

- ☒ Small entity
\$250.00

☐ Other than a small entity
\$500.00

Pursuant to Patent Appeals, the fee for request for Oral Hearing is:

☐ Small entity
\$500.00

☐ Other than a small entity
\$1,000.00

Appeal Brief fee Due \$250.00

4. Extension of Time Fees

(a) ☐ Applicant petitions for an extension of time under 37 C.F. R. 1.136 for the total number of months checked below (fees pursuant to 37 C.F.R. 1.17(a)-(d).

<u>Extension of Time</u>	<u>Large Entity Fee</u>	<u>Small Entity Fee</u>
<input type="checkbox"/> One (1) month .	_____ \$ 120.00	_____ \$ 60.00
<input type="checkbox"/> Two (2) month .	_____ \$ 450.00	_____ \$ 225.00
<input checked="" type="checkbox"/> Three (3) month .	_____ \$ 1020.00	_____ \$ 510.00
<input type="checkbox"/> Four (4) month .	_____ \$ 1,590.00	_____ \$ 795.00
<input type="checkbox"/> Five (5) month .	_____ \$ 2,160.00	_____ \$ 1080.00

Fee: \$_____

If an additional extension of time is required, please consider this petition thereof.

☐ An extension for _____ months has already been secured, and the fee paid therefore of \$_____ is deducted from the total fee due for the total months of extension is now requested.

Extension fee due with this request \$_____

or

(b) ☒ Applicant believes that no extension of time is required. However, this conditional petition is being made to provide for the possibility that applicant has inadvertently overlooked the need for a petition and fee for extension of time.

5. TOTAL FEE DUE

The total fee due is:

Appeal Brief Fee \$250.00
Extension Fee (if any) \$ 0.00

6. FEE PAYMENT

[X] A Check No. 1522 for the above-specified full fee is enclosed. However, in case Applicant inadvertently miscalculated any required fee, the Commissioner is hereby authorized to charge the necessary additional amount associated with this communication or credit any overpayment to **Deposit Account No: 500482**. A duplicate copy of this authorization is enclosed.

[] Charge Account No. **500482** the sum of \$_____.
A duplicate of this transmittal is attached.

7. FEE DEFICIENCY

[X] If any additional extension and/or fee is required, this is a request therefore and to charge to Account No. 500482.

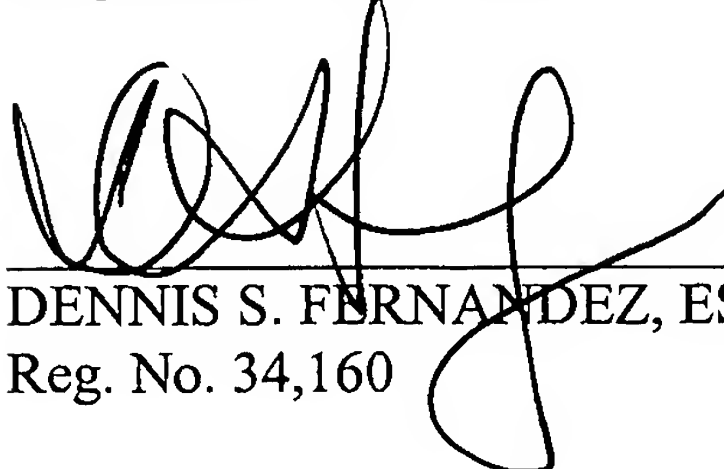
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Please direct all correspondence concerning the above-identified application to the following Custom Number and Address:

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3/31/06
Date